

**APPLICANT:**

VA-30326                      AIRS ID 51-083-0004  
ABB Power T & D Company  
P. O. Box 920  
South Boston, VA 24592

**FACILITY LOCATION:**

Highway 58, 2 miles west of intersection of Highways 501 and 58 in Halifax County  
UTM Coordinates are ZONE: 17 EASTING: 685.7 km NORTHING: 4060.6 km

**FACILITY DESCRIPTION:**

ABB Power T & D Company is a manufacturer of transformers covered by Standard Industrial Classification (SIC) Code 3612. The facility has the potential to operate twenty-four (24) hours per day, seven (7) days per week, fifty-two (52) weeks per year. This plant produces small to large size transformers for the electric utility industry, using both purchased and on-site manufactured parts.

**EMISSIONS SUMMARY:**

PLANTWIDE EMISSIONS SUMMARY [TONS PER YEAR]		
CRITERIA POLLUTANTS	POTENTIAL EMISSIONS	1996 ACTUAL EMISSIONS
PM	76.4	5.2
Volatile Organic Compounds (VOC)	204.9	90.2

**TITLE V PROGRAM APPLICABILITY BASIS:**

This facility has the potential to emit 204.9 tons per year of VOCs. Due to this facility's potential to emit over 100 tons per year of a criteria pollutant, ABB Power T & D Company is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 9 VAC 5 Chapter 80 Article 1.

**LEGAL AND FACTUAL BASIS FOR DRAFT PERMIT CONDITIONS:**

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the Commonwealth of Virginia Federal Operating Permit Regulations for the purposes of Title V of the Federal Clean Air Act (9 VAC 5 Chapter 80 Article 1), and underlying applicable requirements in other state and federal rules. Applicable requirement means all of the following as they apply to emission units in a Title V source:

- a. Any standard or other requirement provided for in the State Implementation Plan or the Federal Implementation Plan, including any source-specific provisions such as consent agreements or orders.

- b. Any term or condition of any preconstruction permit issued pursuant to 9 VAC 5-80-10, Article 8 (9 VAC 5-80-1700 et seq.) of this part or 9 VAC 5-80-30 or of any operating permit issued pursuant to 9 VAC 5 Chapter 80 Article 5, except for terms or conditions derived from applicable state requirements or from any requirement of these regulations not included in the definition of applicable requirement.
- c. Any standard or other requirement prescribed under these regulations, particularly the provisions of 9 VAC 5 Chapter 40 (9 VAC 5-40-10 et seq.), 9 VAC 5 Chapter 50 (9 VAC 5-50-10 et seq.) or 9 VAC 5 Chapter 60 (9 VAC 5-60-10 et seq.), adopted pursuant to requirements of the federal Clean Air Act or under § 111, 112 or 129 of the federal Clean Air Act.
- d. Any requirement concerning accident prevention under § 112(r)(7) of the federal Clean Air Act.
- e. Any compliance monitoring requirements established pursuant to either § 504(b) or § 114(a)(3) of the federal Clean Air Act or these regulations.
- f. Any standard or other requirement for consumer and commercial products under § 183(e) of the federal Clean Air Act.
- g. Any standard or other requirement for tank vessels under § 183(f) of the federal Clean Air Act.
- h. Any standard or other requirement in 40 CFR Part 55 to control air pollution from outer continental shelf sources.
- i. Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the federal Clean Air Act, unless the administrator has determined that such requirements need not be contained in a permit issued under this article.
- j. With regard to temporary sources subject to 9 VAC 5-80-130, (i) any ambient air quality standard, except applicable state requirements, and (ii) requirements regarding increments or visibility as provided in Article 8 (9 VAC 5-80-1700 et seq.) of this part.
- k. Any standard or other requirement of the acid deposition control program under Title IV of the Clean Air Act or the regulations promulgated thereunder.
- l. Any standard or other requirement governing solid waste incineration under §129 of the Clean Air Act.

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 9 VAC 5 Chapter 80 Article 1 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that

is enforceable by the state but is not federally-enforceable is identified in the draft Title V permit as such.

**REQUEST FOR VARIANCES OR ALTERNATIVES:**

None

**PERIODIC MONITORING:**

Since the woodworking portion of this facility is an existing (unpermitted) facility that emits wood dust controlled by a fabric filter, it is "virtually impossible" for this process to violate the opacity emission standard of 20% or the grain loading standard of 0.05 gr/scf. As long as the particulate emissions are vented through a properly operating control device, in this particular case a fabric filter, there should be no visible emissions and the standards are easily attained. Woodworking at this facility is used only to prepare wood structural supports for the product; therefore, the amount of woodworking is minimal. Weekly observations of the fabric filter exhaust stack are required. If visible emissions are found, corrective action must be taken. Visible emissions have been selected as the indicator because they are indicative of good operation and maintenance of a fabric filter. Since the shot blasting operation is permitted, it is required to be controlled by a fabric filter, and has an opacity emission standard of 5%, and a PM emissions limit of 0.5 ton per year. The fabric filter has a conservatively rated control efficiency of 99%, which yields the potential emission rate of 0.5 tons per year. The calculated PM emissions are based on throughput which is limited in II.D.1(b). Typical shot blast units controlled by a fabric filter do not exhibit visible emissions. The permit requires weekly observations of the fabric filter exhaust stack and for immediate corrective action to be taken if needed. For the coating process, records of monthly and annual usage of all VOC-containing materials, including tracking HAPs, are required and all used are assumed to evaporate. All ovens and heaters are fired by natural gas (with propane as backup) or are electric. According to the EPA Memorandum "Periodic Monitoring Guidance for Title V Operating Permits Programs", it is "virtually impossible" for a gas combustion unit firing pipeline grade natural gas and being properly maintained to violate a SO<sub>2</sub>, particulate matter, or opacity emission standard. Thus, adequate periodic monitoring is attained since the permit requires proper maintenance of the fabric filter, weekly inspections, and records of VOCs applied, and since the source burns natural gas (with propane back-up) and Condition III. A. 3. requires proper maintenance. Also, the source has been inspected annually since 1982 and has been found to be in compliance each time. No visible emissions have been observed during inspections.

**COMMENT PERIOD:**

The public notice appeared in *The News & Record* on December 16, 1999.

Beginning Date: December 16, 1999

Ending Date: January 15, 2000

All written comments should be addressed to the following individual and office:

Department of Environmental Quality  
Lynchburg Satellite Office  
7705 Timberlake Road  
Lynchburg, VA 24502  
Phone: (804) 582-5120 Fax: (804) 582-5125

**PROCEDURE FOR REQUESTING PUBLIC HEARING:**

During the public comment period any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for a public hearing shall be in writing to the above address and shall state the nature of the issues proposed to be raised in the hearing. The Director shall grant such a request for a hearing if he concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.